



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/590,876

07/10/2007

Hartmut Schumacher

10191/4350

3753

26646 7590 08/19/2009
KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

RUTLAND WALLIS, MICHAEL

ART UNIT

PAPER NUMBER

2836

MAIL DATE

DELIVERY MODE

08/19/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,876	Applicant(s) SCHUMACHER ET AL.	
	Examiner MICHAEL RUTLAND WALLIS	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :8/25/06; 6/6/08; 1/11/08; 1/29/09.

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: the word "autarkic" appears multiple times in the specification. Applicant should translate or properly define the term.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ravas, Jr. et al. (U.S. Pat. No. 5,420,790)

With respect to claim 7 Ravas teaches a device (Fig. 1) for supplying an ignition current from an energy reserve to at least one ignition power module, comprising: a voltage regulator (item 20) connected between the energy reserve (item 16 and/or 30, 32) and the at least one ignition power module (item 8) such that the voltage regulator sets (via controlled switching of items 11 and 14) a voltage (delivered voltage) at the at

Art Unit: 2836

least one ignition power module at a predetermined level (doubled or tripled, col. 3 line 4).

With respect to claim 8 Ravas teaches the voltage regulator is disconnectable (via removal of power) and allows an electric current to be supplied to the at least one ignition power module as a function of an external microcontroller signal (RST*).

With respect to claim 10 Ravas teaches a safety semiconductor including at least one power transistor (item 14).

With respect to claim 12 Ravas teaches a polarity reversal protection diode (for example item 12) situated between the energy reserve and the voltage regulator.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ravas, Jr. et al. (U.S. Pat. No. 5,420,790) in view of Ravas, Jr. et al. (U.S. Pat. No. 5,459,449)

With respect to claim 9 Ravas teaches the device of claim 8, however does not teach the further limitation of diagnosis as recited. Ravas 449 teaches a diagnosis (item 44) is provided for a safety semiconductor (item 20 or 34). It would have been obvious

Art Unit: 2836

to one of ordinary skill in the art at the time of the invention to modify Ravas to include the diagnosis of the device in order to allow for testing to insure proper operation of the device.

With respect to claim 11 Ravas teaches the device of claim 7, however does not teach the further limitation of diagnosis as recited. Ravas 449 teaches at least one current source (item 30) assigned to the voltage regulator (item 22) for diagnosis (col. 2 line 65) of the at least one ignition power module. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ravas to include the diagnosis of the device in order to allow for testing to insure proper operation of the device.

Alternatively claims 7-8, 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Saito et al. (U.S. Pat. No. 5805,058)

With respect to claim 7 Saito teaches a device (Fig. 1) for supplying an ignition current from an energy reserve to at least one ignition power module, comprising: a voltage regulator (item 4) connected between the energy reserve (item 71-74) and the at least one ignition power module (see items 101-104) such that the voltage regulator sets (via the stepping-up) a voltage (delivered voltage) at the at least one ignition power module at a predetermined level.

With respect to claim 8 Saito teaches the voltage regulator is disconnectable (via items 2 and 3) and allows an electric current to be supplied to the at least one ignition power module as a function of an external microcontroller signal (see controlled switching of items 26-29).

Art Unit: 2836

With respect to claim 10 Saito teaches a safety semiconductor including at least one power transistor (see power transistor switching circuitry shown in Fig. 1).

With respect to claim 12 Ravas teaches a polarity reversal protection diode (items 18-21 and/or 81-84) situated between the energy reserve and the voltage regulator.

Alternatively Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saito et al. (U.S. Pat. No. 5805,058) in view of Ravas, Jr. et al. (U.S. Pat. No. 5,459,449)

With respect to claim 9 Saito teaches the device of claim 8, however does not teach the further limitation of diagnosis as recited. Ravas 449 teaches a diagnosis (item 44) is provided for a safety semiconductor (item 20 or 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ravas to include the diagnosis of the device in order to allow for testing to insure proper operation of the device.

With respect to claim 11 Saito teaches the device of claim 7, however does not teach the further limitation of diagnosis as recited. Ravas 449 teaches at least one current source (item 30) assigned to the voltage regulator (item 22) for diagnosis (col. 2 line 65) of the at least one ignition power module. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Ravas to include the diagnosis of the device in order to allow for testing to insure proper operation of the device.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Rutland-Wallis whose telephone number is 571-272-5921. The examiner can normally be reached on Monday-Thursday 7:30AM-6:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bernie Rexford can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Michael Rutland-Wallis/

Examiner, Art Unit 2836